OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

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NOTICE OF PROPOSED MODIFICATION TO

CALIFORNIA CODE OF REGULATIONS

TITLE 8: Chapter 4, Subchapter 4, Article 29, Section 1720 of the Construction Safety Orders

Concrete Pumps and Placing Booms

Pursuant to Government Code Section 11346.8(c), the Occupational Safety and Health Standards Board (Standards Board) gives notice of the opportunity to submit written comments on the above-named standard in which modifications are being considered as a result of public comments and/or Board staff consideration.

On June 16, 2005, the Standards Board held a Public Hearing to consider revisions to Title 8, Section 1720, of the Construction Safety Orders. The Standards Board received comments on the proposed revisions. The standards have been modified as a result of these comments and Board consideration.

A copy of the full text of the standards as originally proposed, and a copy of the pages with the modifications clearly indicated, are attached for your information. In addition, a summary of all comments regarding the original proposal and staff responses is included.

Pursuant to Government Code section 11346.8(d), notice is also given of the opportunity to submit comments concerning the addition to the rulemaking file of the following documents relied upon:

"Safety Manual – A guide for the prevention of accidents when driving, operating, cleaning, and maintaining concrete pumps, placing booms, and related equipment." Version 4.0.2+, December 2003. American Concrete Pumping Association, 606 Enterprise Drive, Lewis Center, OH 43035.

ASME B30.27, Material Placement Systems. Draft version, B3027_02_05.pdf. ASME, Three Park Avenue, New York, New York 10016-5990.

Letter to Keith Umemoto, Executive Officer of the Occupational Safety and Health Standards Board from Frank Strasheim, Regional Administrator, Region IX, U.S. Department of Labor, dated May 13, 2005.

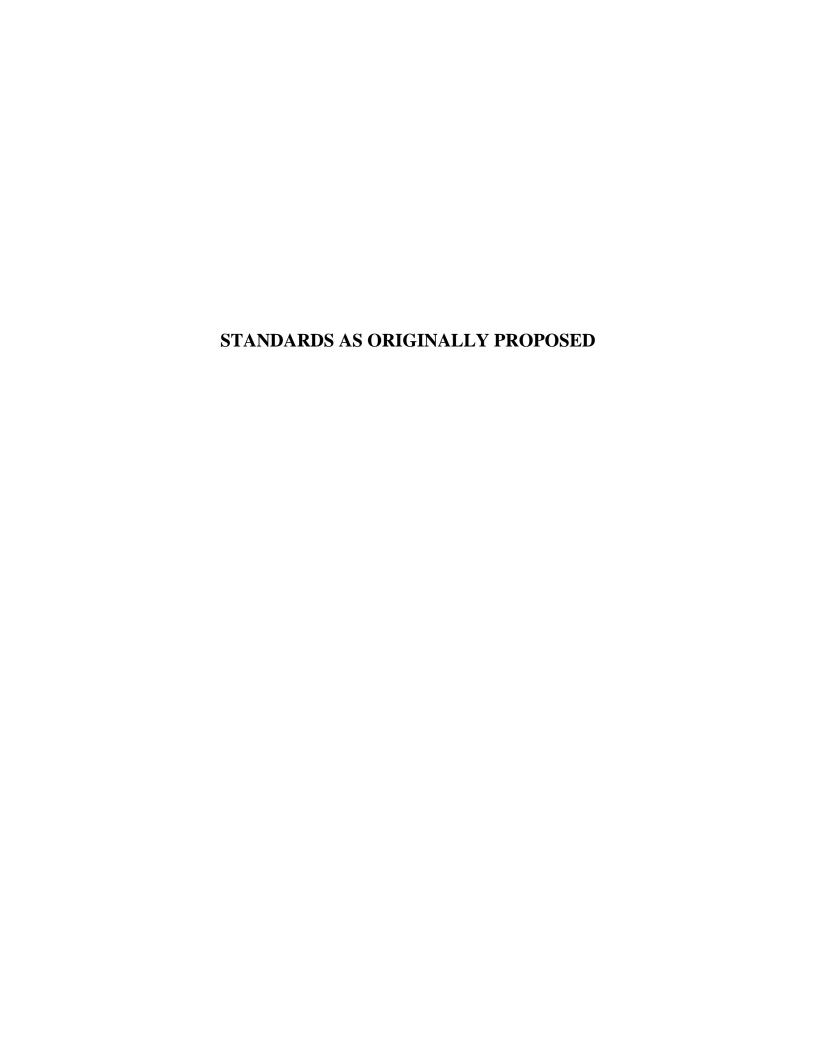
Copies of these documents are available for review during normal business hours at the Standards Board office located at the address listed above.

Any written comments on these modifications must be received by 5:00 p.m. on January 3, 2006, at the Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350, Sacramento, California 95833. The standard will be scheduled for adoption at a future business meeting of the Standards Board.

The Standards Board's rulemaking files on the proposed action are open to public inspection Monday through Friday, from 8:00 a.m. to 4:30 p.m., at the Standards Board's office at 2520 Venture Oaks Way, Suite 350, Sacramento, California 95833.

Inquiries concerning the proposed changes may be directed to Michael Manieri, Principal Safety Engineer, at (916) 274-5725.

	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
Date: December 14, 2005	Keith Umemoto, Executive Officer



CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD, TITLE 8, CHAPTER 4

Amend Section 1720 to read:

- §1720. Placement of Concrete.
 - (a) Concrete Buggies.
 - (1) Handles of buggies shall not extend beyond the wheels on either side of the buggy.
 - (2) Handles shall be guarded or equipped with knuckle guards.
 - (b) Pumpcrete Systems Concrete Pumps and Placing Booms.
- (1) Pumperete or similar systems using discharge pipes shall be provided with pipe supports designed for 100 percent overload Scope. This subsection is applicable to truck-mounted concrete boom pumps, trailer-mounted concrete pumps and separate concrete placing booms.
- (2) Compressed air hose in such systems shall be provided with fail safe joint connectors to prevent separation of sections when pressurized Definitions.
 - (A) Concrete delivery hose. A flexible concrete delivery hose which has two end couplings.
- (B) Control panel. The place where the control actuating devices for the operation of the machine are located.
- (C) Delivery system. Delivery lines, hoses, and their components, as well as transfer valves, through which the material to be transported is pumped.
 - (D) End hose. A flexible concrete delivery hose which has only one end coupling.
- (E) Placing boom. Manual or power driven, slewable working device, consisting of one or more extendable or foldable parts which support the concrete delivery system, and which direct the discharge into the desired location.
- (F) Remote control. A control device for the machine that is portable and may be connected to the machine by a wire umbilical cord or linked by radio or other wireless means.
 - (3) General.
 - (A) Equipment identification and ratings.
- 1. The following information shall be legibly marked on a durable identification plate on the concrete pump.
 - a. Manufacturer's name.
 - b. Year of manufacture.
 - c. Serial number.
 - d. Type or model identification.
 - e. Maximum working pressure in the hydraulic system.
 - f. Maximum material pressure.
 - g. Power rating for electrical equipment (voltage, frequency, amperage).
- 2. The following information shall be legibly marked on a durable identification plate on the placing boom.
 - a. Manufacturer's name.
 - b. Year of manufacture.
 - c. Serial number.
 - d. Type or model identification.

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- e. Maximum working pressure in the hydraulic system.
- f. Maximum weight per foot of the delivery system, including concrete at 150 lbs/foot³.
- (B) Set-up and operation. Concrete pumping equipment and placing booms shall be set-up and operated in accordance with the manufacturer's operation and safety manuals, and these Orders.
- 1. The manufacturer's operation manual shall be maintained in legible condition and shall be available to the operator during set-up and operation of the equipment.
 - 2. The concrete placing boom shall not be used to drag hoses or lift other loads.
 - 3. Concrete delivery hoses shall not be used as end hoses.

EXCEPTION for (B)3: Shotcrete operations.

- (C) Controls.
- 1. Controls shall have their function clearly marked.
- 2. If there are several control locations, the same operation shall only be possible from one location at a time.
 - 3. Controls shall be safeguarded against unintentional operation.
- EXCEPTION for (C)3: Equipment manufactured before
- *].
- 4. Each machine shall be equipped with an emergency stop system.
- a. The machine shall be equipped with emergency stop devices at the control panels and at the remote control device.
- (D) Guarding. Guarding shall be provided and maintained in accordance with the manufacturers' specifications to prevent unintentional access to moving parts.
 - (E) Delivery systems.
- 1. Concrete pumping systems using discharge pipes shall be provided with pipe supports designed for twice the rated load, including concrete at 150 lbs/ft³.
- 2. Compressed air hoses, if used, shall be equipped with connecting ends that shall be chained or otherwise secured to prevent whipping in case of separation when pressurized.
- (F) Operation of concrete placing booms in proximity of overhead high-voltage lines shall be in accordance with Article 37 of the High-Voltage Electrical Safety Orders.
- 1. Warning Signs. Concrete placing booms shall be posted with durable, permanent warning signs in accordance with Section 2947.
- EXCEPTION: Minimum clearances from overhead high-voltage lines in accordance with manufacturers' specifications may be posted where minimum clearance distances are greater than those prescribed by Article 37 of the High-Voltage Electrical Safety Orders.

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- (4) Inspection, maintenance and repairs.
- (A) A qualified person shall visually inspect the machine's controls and functional mechanisms for maladjustment, damage or deterioration prior to daily use. Any condition that affects the safe operation shall be corrected prior to use.
- 1. Hoses, clamps and pipes shall be inspected by a qualified person prior to use. Damaged or defective hoses, clamps or pipes shall not be used.
- (B) A preventative maintenance program shall be established and implemented in accordance with the manufacturer's specifications.
- (C) Inspection, maintenance and repairs shall be performed by a qualified person in accordance with the manufacturer's specifications and procedures.
 - (D) Inspection records shall include the following:
 - 1. The identification of the components and parts inspected and tested.
 - 2. A description of test methods, results, and repairs made.
 - 3. Names and signatures of persons performing the inspections.
 - (E) Records of inspections and maintenance shall be made available to the Division on request.
 - (5) Manufacturer no longer in business.
- If the manufacturer is no longer in business and manufacturer's specifications are no longer available, required set-up, operation, inspection, and maintenance procedures and repairs shall be specified by a registered professional engineer experienced in the design of concrete pumps and placing booms.
- (A) Repairs shall be performed by a qualified person under the direction of a registered professional engineer experienced in the design of concrete pumps and placing booms.

* * * * *

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

PROPOSED MODIFICATIONS

(Modifications are indicated in bold, double underline wording for new language, and bold, strikeout for deleted language.)

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD, TITLE 8, CHAPTER 4

Amend Section 1720 to read:

- §1720. Placement of Concrete.
 - (a) Concrete Buggies.
 - (1) Handles of buggies shall not extend beyond the wheels on either side of the buggy.
 - (2) Handles shall be guarded or equipped with knuckle guards.
 - (b) Pumpcrete Systems Concrete Pumps and Placing Booms.
 - (1) Pumperete or similar systems using discharge pipes shall be provided with pipe supports designed for 100 percent overload Scope. This subsection is applicable to truck-mounted concrete boom pumps, trailer-mounted concrete pumps and separate concrete placing booms.
- (2) Compressed air hose in such systems shall be provided with fail safe joint connectors to prevent separation of sections when pressurized Definitions.
- (A) Concrete delivery hose. A flexible <u>concrete</u> delivery hose <u>having a coupling on each</u> <u>end which has two end couplings</u>.
- (B) Control panel. The place where the control actuating devices for the operation of the machine are located.
- (C) Delivery system. Delivery lines, hoses, and their components, as well as transfer valves, through which the material to be transported is pumped.
- (D) End hose. A flexible concrete delivery hose which has only one end coupling.
- (E) Placing boom. Manual or power driven, slewable working device, consisting of one or more extendable or foldable parts which support the concrete delivery system, and which direct the discharge into the desired location.
- (F) Remote control. A control device for the machine that is portable and may be connected to the machine by a wire umbilical cord or linked by radio or other wireless means.
- (3) General.
- (A) Equipment identification and ratings.
- 1. The following information shall be legibly marked on a durable identification plate on the concrete pump.
- a. Manufacturer's name.
- b. Year of manufacture.
- c. Serial number.
- d. Type or model identification.
- e. Maximum working pressure in the hydraulic system.
- f. Maximum material pressure.
- g. Power rating for electrical equipment (voltage, frequency, amperage).
- 2. The following information shall be legibly marked on a durable identification plate on the placing boom.

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- a. Manufacturer's name.
- b. Year of manufacture.
- c. Serial number.
- d. Type or model identification.
- e. Maximum working pressure in the hydraulic system.
- f. Maximum weight per foot of the delivery system, including concrete at 150 lbs/foot³.
- (B) Set-up and operation. Concrete pumping equipment and placing booms shall be set-up and operated in accordance with the manufacturer's operation and safety manuals, and these Orders.
- 1. The manufacturer's operation manual shall be maintained in legible condition and shall be available to the operator during set-up and operation of the equipment.
 - 2. The concrete placing boom shall not be used to drag hoses or lift other loads.
 - 3. Concrete delivery hoses shall not be used as end hoses.

EXCEPTIONS for (B)3:

1. Shotcrete operations.

2. When the hose is supported by the walking/working surface while pumping and placing flatwork.

(C) Controls.

- 1. Controls shall have their function clearly marked.
- 2. If there are several control locations, the same operation shall only be possible from one location at a time.

EXCEPTION for (C)(2):

Emergency stop controls required by subsection (b)(3)(C)4 shall have priority and shall be operable from any installed location.

3. Controls shall be safeguarded against unintentional operation.

EXCEPTION for (C)3: Equipment manufactured before [OAL to insert the effective date of the regulation].

- 4. Each machine shall be equipped with an emergency stop system.
- a. The machine shall be equipped with emergency stop devices at the control panels and at the remote control device.
- (D) Guarding. Guarding shall be provided and maintained in accordance with the manufacturers' specifications to prevent unintentional access to moving parts.
 - (E) Delivery systems.
- 1. Concrete pumping systems using discharge pipes shall be provided with pipe supports designed for twice the rated load, including concrete at 150 lbs/ft³.
- 2. Compressed air hoses, if used, shall be equipped with connecting ends that shall be chained or otherwise secured to prevent whipping in case of separation when pressurized.
- (F) Operation of concrete placing booms in proximity of overhead high-voltage lines shall be in accordance with Article 37 of the High-Voltage Electrical Safety Orders.
- 1. Warning <u>Ssigns</u>. Concrete placing booms shall be posted with durable, <u>permanent</u> warning <u>signs</u> in accordance with Section 2947.

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PROPOSED STATE STANDARD, TITLE 8, CHAPTER 4

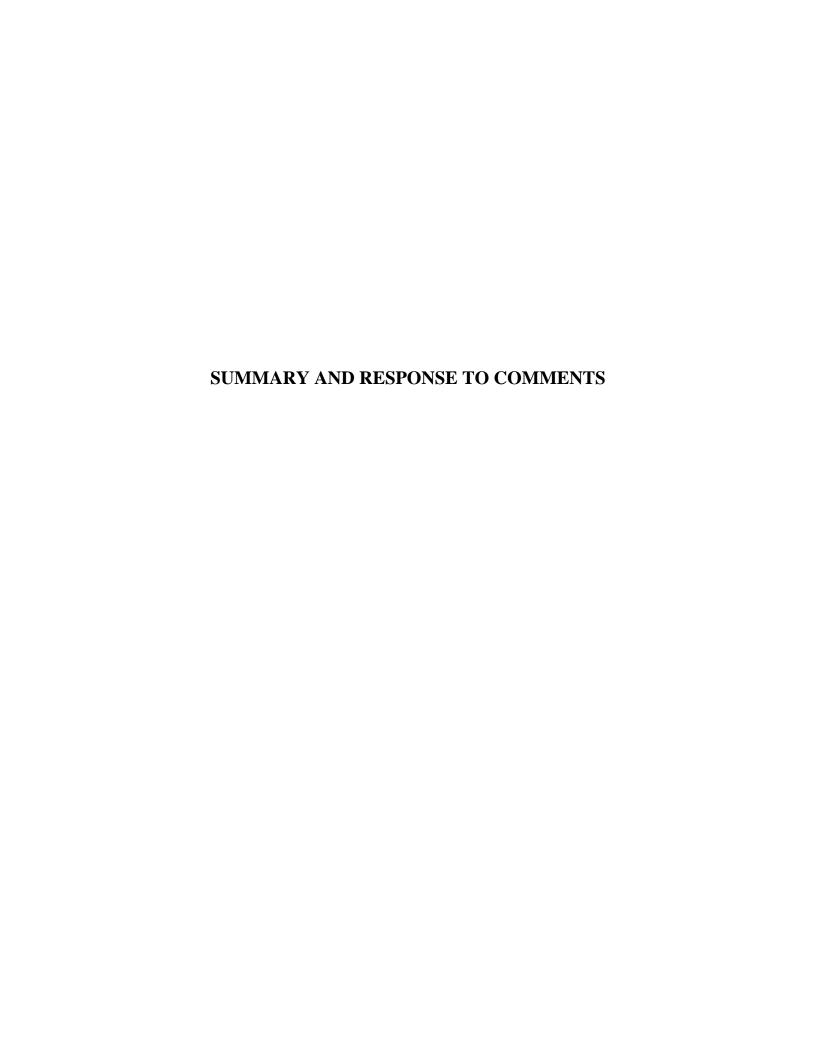
EXCEPTION: Minimum clearances from overhead high-voltage lines in accordance with manufacturers' specifications may be posted where minimum clearance distances are greater than those prescribed by Article 37 of the High-Voltage Electrical Safety Orders.

(4) Inspection, maintenance and repairs.

- (A) A qualified <u>attendant or operator person</u> shall visually inspect the machine's controls and functional mechanisms for maladjustment, damage or deterioration prior to daily use. Any condition that affects the safe operation shall be corrected prior to use.
- 1. Hoses, clamps and pipes shall be inspected by a qualified <u>attendant or operator person</u> prior to use. Damaged or defective hoses, clamps or pipes shall not be used.
- (B) A preventative maintenance program shall be established and implemented in accordance with the manufacturer's specifications.
- (C) Inspection, maintenance and repairs shall be performed by a qualified person in accordance with the manufacturer's specifications and procedures.
 - (D) Inspection records shall include the following:
 - 1. The identification A listing of the components and parts inspected and tested.
 - 2. A **brief** description of test methods, results, and repairs made.
 - 3. Names and signatures of persons performing the inspections.
 - (E) Records of inspections and maintenance shall be made available to the Division on request.
 - (5) Manufacturer no longer in business.
- (A) If the manufacturer is no longer in business and manufacturer's specifications are no longer available, required set-up, operation, inspection, and maintenance procedures and repairs shall be specified by a registered professional engineer qualified person experienced in the design field of concrete pumps and placing booms.
- (B) (A) Inspection, maintenance and Rrepairs shall be performed by a qualified person in accordance with the specifications and procedures established under the provisions of subsection (b)(5)(A), under the direction of a registered professional engineer experienced in the design of concrete pumps and placing booms.

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NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.



SUMMARY AND RESPONSE TO WRITTEN AND ORAL COMMENTS

I. Written Comments

The Board received comments on the proposal by telecopy dated June 21, 2005, from the following individuals:

Name: <u>Title:</u> <u>Affiliation:</u>

Mike Cusak Past President Concrete Pumping Association

Jim Bury Manager - Engineering, Quality Putzmeister America

and Documentation

Robert Edwards Schwing America

Art Fink Owner Associated Concrete Pumping

Doug Marquis Manager Conco Pumping

Gunther Merli Owner Merli Concrete Pumping
Duane Remus Dir. of Technical Development Reed Manufacturing

Comment No. 1:

The commenters requested a definition be added to Section 1720(b)(2) for "qualified person" as "a person who, by possession of a recognized degree in an applicable field, or certificate of professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter and work." They stated that this would harmonize Title 8 with CPMA 27-2000 and ASME B30.27.

Response:

Qualified person is defined in Construction Safety Orders (CSO) Section 1504 as "A person designated by the employer who by reason of training, experience or instruction has demonstrated the ability to safely perform all assigned duties and, when required, is properly licensed in accordance with federal state, or local laws and regulations." To define the term differently for purposes of Section 1720 would overlap the existing definition and potentially create confusion. Therefore the Board does not believe that further modification to the proposal is necessary as a result of this comment.

Comment No. 2:

The commenters requested a definition for "designated person" as "a person selected or assigned by the employer or the employer's representative as being competent to perform specific duties." Their stated rationale is to harmonize Title 8 with CPMA 27-2000 and ASME B30.27.

Response:

The Board is of the opinion that the addition and definition of a new term is unnecessary. The Board proposes, instead, to use the already defined term "qualified operator" which is defined in Section 1504, as: "A person designated by the employer who by reason of training, experience or instruction has demonstrated the ability to safely perform all assigned duties and, when required, is properly licensed in accordance with federal, state, or local laws and regulations." This comment is also linked to Comment No. 10, which will be addressed below.

Comment No. 3:

The commenters requested changing the definition for "concrete delivery hose" to "a flexible delivery hose having a coupling on each end." Their stated rationale is to harmonize Title 8 with CPMA 27-2000 and ASME B30.27.

Response:

The Board accepts this requested modification as it conforms the definition to the industry standard.

Comment No. 4:

The commenters requested modifying subsection (b)(3)(B)1 by adding the following: "If the manufacturer is no longer in business, a minimum of the industry safety manual shall be maintained and available to the operator." Their stated rationale is that if the manufacturer has gone out of business, the manufacturer's operation manual may no longer be available.

Response:

The Board has determined that the "industry safety manual" referred to by the commenters is the "Safety Manual" published by the American Concrete Pumping Association, Lewis Center, OH. The Board has reviewed this proposal and is of the opinion that, although the "Safety Manual" is a valuable tool to have available to the crew for covering hazards and their avoidance, it does not provide equipment-specific instructions for the set-up or operation of the equipment, and therefore it cannot be used in lieu of an operation manual prepared in accordance with the provisions of subsection (b)(5)(A). Therefore the Board does not believe that further modification to the proposal is necessary as a result of this comment.

Comment No. 5:

The commenters requested modifying subsection (b)(3)(B)3 by adding the <u>underlined</u> text as follows: "Concrete delivery hoses shall not be used as end hoses <u>when suspended above</u> <u>workers</u>." They opine that the second end poses no unusual hazard when the delivery hose is lying on the ground.

Response:

Based on the discussion at the advisory committee, there are occasions where the delivery hose may be run across a walking/working surface for the placement of flatwork, such as decks and patios. In this situation, it is not uncommon for the installer to "break back" the hose section-by-section as he works back toward the pump from the farthest end of the pour. It would be difficult and possibly create a greater hazard if the worker had to re-attach the end hose after each hose section is broken off. This proposal is intended to permit this common practice of breaking back the delivery hose when pouring flatwork. Therefore, the Board accepts this comment to the extent that such work will be addressed as an exception to subsection (b)(3)(B)3.

Comment No. 6:

The commenters requested adding an exception for subsection (b)(3)(C)2: "Emergency stop shall function from all connected locations." Their stated rationale is that this important safety device should be working at all times and at all connected locations (which may be more than the minimum specified in this proposal).

Response:

The Board accepts this proposal to the extent that it proposes an exception that will read: "Emergency stop controls required by subsection (b)(3)(C)4 shall have priority and shall be operable from any installed location."

Comment No. 7:

The commenters requested that subsection (b)(3)(E)1 be deleted entirely. They state that there have been no accidents involving pipeline falling from a boom, or with items suspended over workers from the last elbow (end hose or reducers). They opine this subsection is unnecessary because it is covered in the manufacturer's operation manuals and safety manuals.

Response:

This section only pertains to piping and not to hoses. The substance of this section, previously found in subsection 1720(b)(1), has been in Federal OSHA Standards [29 CFR 1926.702(e)(1)], and California Title 8 Standards for many years. The advisory committee felt the existing verbiage, based on the Federal Standard lacked clarity. The Board therefore developed a clarification that has been found by Federal OSHA to improve employer/employee ability to understand the requirements of the standard and to be more effective than the Federal standard. ¹

Since California is required to be at least as effective as the counterpart federal standards, the Board cannot completely delete this provision as the commenters requested. One option would be to revert to the existing verbiage. Since the advisory committee found the existing language to be unclear, and Federal OSHA has accepted the proposed clarifications, the Board does not believe that further modification to the proposal is necessary as a result of this comment.

Comment No. 8:

The commenters requested modification to the warning sign requirement in subsection (b)(3)(F)1 to read "durable, replaceable permanent warning signs..." Their stated rationale is that warning signs cannot be made to last permanently, even using the best materials and inks. However, they state that each manufacturer supplies replacement warning labels on request.

Response:

The Board acknowledges that the proposed wording is subject to misinterpretation. The Board therefore proposes to modify the provision, consistent with Section 2947, by deleting "permanent."

Comment No. 9:

The commenters requested amending the exception for Subsection (b)(3)(F)1 to read: "Minimum clearances from overhead high-voltage lines in accordance with manufacturers' specifications may be posted <u>instead of Section 2947</u> where minimum clearance distances are greater than those prescribed by Article 37 of the High-Voltage Electrical Safety Orders.

¹ Advisory opinion from USDOL, Region IX, to Keith Umemoto, Executive Director, OSHSB dated May 13, 2005.

Response:

The exception for subsection (b)(3)(F)1 already permits manufacturers minimum clearances to be posted instead of those required by Section 2947 when the manufacturer's clearances exceed those of Section 2947. Therefore, the proposed amendment is unnecessary and the Board does not believe that further modification to the proposal is necessary as a result of this comment.

Comment No. 10:

With respect to subsections (b)(4)(A) and (b)(4)(A)1, the commenters requested that "qualified" be changed to "designated." Their stated rationale is that using this term will permit the daily inspections to be performed by the pump operator or the mechanic which is the manufacturer's intention for daily inspections. The commenters stated that a "qualified" person, in the terminology commonly used in this industry is typically a certified boom inspector and it is unnecessary, impractical and infeasible to require a certified boom inspector to perform these daily inspections.

Response:

"Qualified person, attendant or operator" as defined in Section 1504 permits daily inspections to be performed by the pump operator or mechanic. Thus, the Board accepts this comment to the extent that it proposes an amendment in order to add further clarity to the proposal, consistent with the industry usage of terms already defined in Title 8.

Comment No. 11:

With regard to subsection (b)(4)(C), the commenters requested removal of "by a qualified person." Their stated rationale is that this modification would allow manufacturer's specifications and procedures to determine whether the repairs can be made by a designated or by a qualified person.

Response:

"Qualified person" is defined in Section 1504 as "a person designated by the employer who by reason of training, experience or instruction has demonstrated the ability to safely perform all assigned duties and, when required, is properly licensed in accordance with federal, state, or local laws and regulations." Thus retention of the term "qualified person" will allow manufacturer's specifications and procedures to establish qualifications for persons making repairs. The removal of this term would eliminate any qualifications for persons performing these tasks. The Board therefore does not believe that further modification to the proposal is necessary as a result of this comment.

Comment No. 12:

With regard to subsection (b)(4)(D)1, the commenters requested deletion of the phrase "identification of the..." Their stated rationale is that this could create confusion as to what constitutes adequate identification; i.e., would each specific part number have to be identified?

Response:

This comment is consistent with concerns that were raised at the advisory committee, therefore the comment is accepted and the subsection has been revised as suggested.

Comment No. 13:

With regard to subsection (b)(4)(D)2, the commenters requested changing "A description..." to "The type..." They were concerned that this could be misinterpreted to require a step-by-step description of the inspection, rather than just identifying the type of inspection.

Response:

The Board accepts this comment to the extent that it proposes a clarification that the records need only include a <u>brief</u> description of test methods, results and repairs made.

Comment No. 14:

With regard to subsection (b)(5) for manufacturers no longer in business, the commenters requested changing "registered professional engineer" to "qualified person." Their stated rationale is that there are no registered professional engineers experienced in the design of concrete pumps and placing booms who are qualified to design set-up, operation, and maintenance procedures. They opined that "qualified person" would allow experts in the field to be utilized.

Response:

The Board finds that the use of "qualified person" in this context will provide equivalent safety since, by definition, a qualified person is "a person designated by the employer who by reason of training, experience or instruction has demonstrated the ability to safely perform all assigned duties and, when required, is properly licensed in accordance with federal state, or local laws and regulations." Therefore the Board accepts this comment. [Note: Also see response to Comment No. 15 below.]

Comment No. 15:

With regard to subsection (b)(5)(A) [Note: this subsection has been renumbered to(b)(5)(B)], the commenters requested changing "qualified person" to "designated person," and "registered professional engineer" to "qualified person." They also requested deletion of "experienced in the design of concrete pumps and placing booms." Their stated rationale is that not all repairs are structural; for example, a mechanic can replace a fitting that leaks. They opine that a qualified person would know the level of skill necessary based on the nature of the repair required. They also note that a registered professional engineer might be a good choice for some repairs; however, by definition, a registered engineer would be covered under the definition of qualified person.

Response:

The Board accepts this comment to the extent that changes are proposed to subsection (b)(5) [including subsections (b)(5)(A) and (B)]. These proposed changes will effectively conform requirements for inspection, maintenance and repair of equipment where the manufacturer is no longer in business and manufacturer's specifications are no longer available to those for equipment where the manufacturer is still in business [see subsection (b)(4)(C)].

The Board thanks the commenters for their suggestions, comments, and participation in the rulemaking process.

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² CSO Section 1504.

II. Oral Comments

Oral comments received at the June 16, 2005, Public Hearing in Irvine, California.

The following individuals gave oral testimony in support of the proposal:

Name: Title: Affiliation:

Armando Esparza Business Manager Laborers Local #652, Santa Ana, CA
Ralph Flores Business Representative Laborers Local #652, Santa Ana, CA
Laborers Local #652, Santa Ana, CA
Laborers Local #300, Los Angeles, CA

Comment:

These individuals stated that their members work with the placing boom and are directly affected by the proposed standards. A number of their members were also in the audience to show support for the proposed standards. The speakers emphasized that safety is imperative for concrete workers. Some said that they personally had worked with concrete placing booms and had personally witnessed instances of unsafe equipment. Mr. Renteria expressed concern about "blowouts" where a plug of concrete can break loose with enough force to puncture plywood. They all agreed that the proposal will increase worker safety.

Response:

The Board thanks the commenters for their testimony in support of the proposal and also thanks their members who attended for their participation in the rulemaking process.

Mr. Robert Edwards, representing Schwing America

Comment:

Mr. Edwards stated that he is Chair of the ASME B30.27 subcommittee and that he was one of the authors of CPMA 27-2000. He stated that, generally speaking, manufacturers support the proposal, but he felt that several issues need to be clarified. Mr. Edwards stated that tipping over of the pumps and whipping of hoses is not addressed. He also stated that some of the language was confusing, and suggested some further work on the proposal was necessary before adoption.

Response:

The Board extended the deadline for comments an additional three business days to permit Mr. Edwards and others to provide specific comments regarding their concerns. Those comments were received and have been addressed under the summary and response to written comments section.

The Board thanks Mr. Edwards for his comments and participation in the rulemaking process.

Mr. Mike Cusack, representing Conco Pumping

Comment:

Mr. Cusack stated that he had been a member of the advisory committee. He commented that he thought the proposal should be adopted with some clarifications and recommended that the advisory committee be reconvened. He specifically mentioned concerns about the definitions for end hose and control panels. He also stated that there are different types of inspections, and clarification is needed about what constitutes a "qualified person." He added that there are no registered professional engineers in the concrete business except those in the employment of manufacturers.

Response:

Board staff requested an opportunity to respond to Mr. Cusack's concerns before establishing a necessity for returning to advisory committee. The Board extended the deadline for comments an additional three business days to permit Mr. Cusack and others to provide specific comments regarding their concerns. Those comments which included the concerns expressed in the oral testimony were received and have been addressed under the summary and response to written comments section.

The Board thanks Mr. Cusack for his comments and participation in the rulemaking process.

Mr. James Bury, representing Putzmeister America Comment:

Mr. Bury, whose company had been represented at the advisory committee, stated that although the advisory committee went well, he felt that some issues were not adequately addressed in the proposal. Specifically, he stated that it would be difficult to follow the "permanent label or decal" and "guarding section" language. He stated that he wanted to make sure that the new standard would not cause confusion or conflict with existing industry standards.

Response:

Mr. Bury was one of the commenters in the telecopy sent September 21, 2005. The Board extended the deadline for comments an additional three business days to permit Mr. Bury and others to provide specific comments regarding their concerns. Those comments which included the concerns expressed in the oral testimony were received and have been addressed under the summary and response to written comments section.

The Board thanks Mr. Bury for his comments and participation in the rulemaking process.

Mr. Leonard Levine, representing the National Concrete Pump Inspectors Association Comment:

Mr. Levine was also a member of the advisory committee. He opined that some in the industry may resist any government standards due to cost concerns. However, he opined that one accident could cost more than a lifetime of inspections. He indicated his support of the proposal.

Response:

The Board thanks Mr. Levine for his support and for his participation in the rulemaking process.